Corps of Engineers Back Bay Study and Inland bays Channel Dredging Notes for the April 6, 2018 Meeting of the Association of Coastal Towns

Background: During Hurricane Sandy there was a combination of flood problems along the Atlantic Seaboard from Virginia to Maine. In addition to storm surge and heavy surf sweeping over the beaches and dunes facing the ocean there was widespread flooding in the tidal bays that back the barrier Islands. This was storm surge that entered the bays through inlets as well as by overtopping the barrier islands. The tremendous damage and human suffering that resulted from that storm prompted Congress to pass a budget supplement that covered much of the cost of response, recovery and future storm mitigation. The first work conducted to defend against future storm impacts was rebuilding Corps project dunes and beaches. Delaware benefitted from that with a complete rebuild of the beaches and dunes in Lewes, Rehoboth, Dewey, Bethany, South Bethany and Fenwick. In addition to that work the beach protecting Rte 1 north of Indian River Inlet was nourished to achieve a design level of protection. As part of the Sandy Supplemental the Corps is undertaking studies in the storm affected states to produce plans to reduce future back bay flooding problems. New Jersey is already in this study phase but Delaware has not started due, in large part, to non-federal cost share funds not being immediately available.

Points to consider for both the Back Bay Study and navigation channel maintenance:

- The Corps has funding to initiate the Feasibility phase of the Delaware Back Bay Flood Risk Management Study. A requirement of this study is, however, that it have a non-federal cost share of \$250,000. Traditionally in Delaware all non-federal cost sharing for coastal protection projects has been borne by the State. Beach preservation funds are used for this as these project to date have been beach and dune construction but these funds are not an available source for back bay flood studies. Conceivably Waterways funds could be used but (1) there are already many demands for the currently available funds and (2) addressing inland bay flooding may not be one of the top expectations members of the General Assembly have for the use of Waterway funds. So the start of the study is delayed while DE determines where the non-federal match can come from.
- Conducting the Back Bay Study does not automatically lead to construction or implementation of projects identified in the study. Separate funding will have to be found to build or implement any and all solutions the Corps identifies in the study. This means at both the federal and non-federal levels. But having the study completed is a necessary first step if any projects are to be built in the future as part of a federal/non-federal partnership. This is similar to the arrangements along the beaches where feasibility studies led to projects that are now constructed and maintained.
- The Corps has been working on ways to manage their many mandates more as a system or portfolio of projects within a region. Stemming from that process we are seeing more and more emphasis on linking Corps mandates, or business lines, so that, say, a project funded primarily to maintain a federal navigation channel will produce useable sediment that can benefit a coastal flood risk through the building of beaches and dunes with sandy sediment or wetlands with silty sediment, or enhance environments that may need sediment for ecological functions and benefits. All three objectives; navigation, flood risk reduction, and

- environmental enhancement are Corps mandates but seldom have they been planned, funded and constructed as a system. We are seeing a changes to this.
- While looking at back bay flooding mitigation it would be a terrible loss if we did not link the
 loss of sediment from beaches and wetlands with the accumulation of sediment in our
 waterways. As we search for sediment to rebuild eroded beaches, to raise the surface of
 wetlands that are not keeping up with sea level rise or are eroding along their edge, or to
 rebuild islands in the bays that have been lost to erosion we would be remiss not to link our
 navigation needs with storm damage reduction initiatives.

These points are good conversation starters for continuing conversations with our Congressional delegation, General Assembly members and DNREC. Finding funding for these endeavors remains our greatest challenge.